



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D4775-1
Job Sheet 169897



Part No: D4775-1

Job Qty: 25 ea

Part Name: Strut Tube



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/3/18

Job Tracking No:

Due Date: 1/19/18

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV C SHEET 2 IPP REV:A 13.02.28 NEW ISSUE DD VERF:JFS IPP REV:B 13.09.26 AS PER REV.B
DD VERF:JLM IPP REV:C 14.01.10 AS PER REV.C DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	25 Ea	1/18/18	1/18/18	0.00	0.00	Start Up Machining-3		<i>M.P. 18/02/13</i>
100	Doosan	25 pcs	1/18/18	1/18/18	0.45	11.01	Doosan		<i>M.P. 18/02/13</i>
110	QC	25 pcs	1/18/18	1/18/18	0.00	0.00	QC2 Machining-3		<i>M.P. 18/02/13</i>
120	QC	25 pcs	1/18/18	1/18/18	0.00	0.00	QC8 Machining-3		<i>J.F. 18-02-13</i>
130	HandFinish	25 pcs	1/18/18	1/18/18	0.00	0.87	HandFinish1		<i>18-02-13</i>
140	QC	25 pcs	1/18/18	1/18/18	0.00	0.00	QC7-4		<i>18-02-13</i>
150	Powdercoat	25 pcs	1/19/18	1/19/18	0.00	0.39	Powdercoat1		<i>18-02-13</i>
155	QC	25 pcs	1/19/18	1/19/18	0.00	0.00	QC3		<i>18-02-13</i>
160	Packaging	25 pcs	1/19/18	1/19/18	0.00	0.00	Packaging3-2		<i>18-02-13</i>
170	QC21-SA	25 Ea	1/19/18	1/19/18	0.00	0.00	QC21	<i>5+357</i>	<i>21 FEB 14 2018</i>

Part Op 100 - 1- Turn as per Folio FB166 Rev: _____ & Dwg D4775 Rev: _____ 2- Tap for 3/8-24 Helical insert check with GO/
Descriptions: NO GO gauge 3

150 - START TIME: *8:20 O.U.T. 3:00 FINISH: 8:50. M 138469.*

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M6061T6T0.625W.125	27	42	0	0

Part Specifications

Specifications could not be found.

Plex 1/3/18 8:54 AM dart.poulin.mario

5017141=10
5130184 = 7
5034347 = 10

Lec 2 1/2 hrs

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

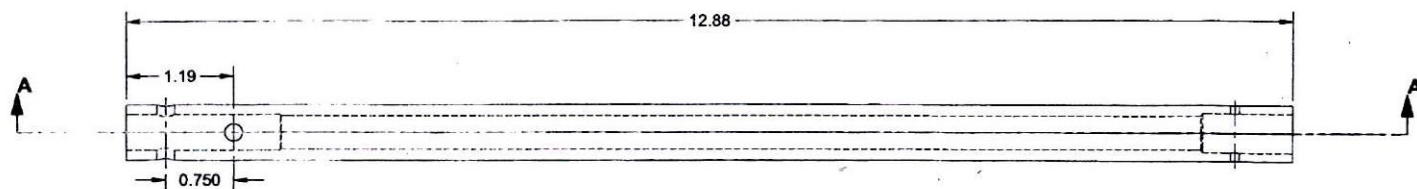
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																				
	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																				
	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																				
Large Fab ☐	Composite ☐	Supplier ☐																						

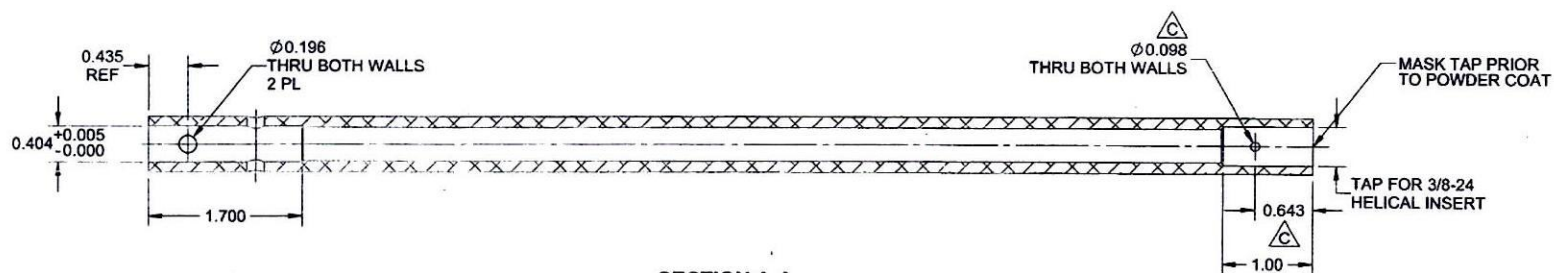
Date :	Step #:	QTY Effective :	MRB (QSI042) Approval
--------	---------	-----------------	-----------------------

Description Work Order Deviation 	Disposition 	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause <table> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table>			Environment	☐	No Re-verification	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	FAULT CATEGORY <table> <tr><td>Pressure/Forced</td><td>☐</td><td>Temperature/Cure</td><td>☐</td><td>Power Loss/Surge</td><td>☐</td><td>Positioned Wrong</td><td>☐</td></tr> <tr><td>Bending</td><td>☐</td><td>Set-up</td><td>☐</td><td>Folio/Program</td><td>☐</td><td>Outside Dimensions</td><td>☐</td></tr> <tr><td>Centre Not Concentric</td><td>☐</td><td>BOM/Route</td><td>☐</td><td>Grain</td><td>☐</td><td>Over/Under tolerance</td><td>☐</td></tr> <tr><td>Cracks</td><td>☐</td><td>Broken/Damage/Defect</td><td>☐</td><td>Weld</td><td>☐</td><td>Part Incorrect</td><td>☐</td></tr> <tr><td>Crimp/Kink/Ripple/Wave</td><td>☐</td><td>Inspection Incomplete/Unqualified</td><td>☐</td><td>Wrong Stock Pulled</td><td>☐</td><td>Part Lost/Missing</td><td>☐</td></tr> <tr><td>Cuffs</td><td>☐</td><td>Contamination</td><td>☐</td><td>Out of Sequence</td><td>☐</td><td>Part Moved</td><td>☐</td></tr> <tr><td>Crushing</td><td>☐</td><td>Countersink</td><td>☐</td><td>Off-set</td><td>☐</td><td>Drawing</td><td>☐</td></tr> <tr><td>Heat Treat</td><td>☐</td><td>Cut Too Short</td><td>☐</td><td>Mislabeled</td><td>☐</td><td>Finish</td><td>☐</td></tr> <tr><td>Wave/Twist in Tube</td><td>☐</td><td>Instructions Incomplete/Unclear</td><td>☐</td><td>Fit/Function</td><td>☐</td><td>Misread</td><td>☐</td></tr> <tr><td>Marks/Chatter</td><td>☐</td><td>Drill Holes</td><td>☐</td><td>Misaligned/off center</td><td>☐</td><td>Turning Sequence</td><td>☐</td></tr> </table>						Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Environment	☐	No Re-verification	☐																																																																																																																																					
Design	☐	Operator	☐																																																																																																																																					
Doc/Data	☐	Offset/Setup	☐																																																																																																																																					
Equip/Tooling	☐	Supplier	☐																																																																																																																																					
Handling/Pre	☐	Training	☐																																																																																																																																					
Material	☐	Use for Testing	☐																																																																																																																																					
Internal Transport	☐	Poor Information	☐																																																																																																																																					
Tribal Knowledge	☐	Rushing	☐																																																																																																																																					
LOA	☐	Product Improvement	☐																																																																																																																																					
Substation	☐	Process Improvement	☐																																																																																																																																					
Past Expiry Date	☐	Manufacturing Process	☐																																																																																																																																					
Misidentified	☐	Past Due	☐																																																																																																																																					
Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐																																																																																																																																	
Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐																																																																																																																																	
Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐																																																																																																																																	
Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐																																																																																																																																	
Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐																																																																																																																																	
Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐																																																																																																																																	
Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐																																																																																																																																	
Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐																																																																																																																																	
Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐																																																																																																																																	
Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐																																																																																																																																	
OTHER : ☐																																																																																																																																								



D4775-1 STRUT TUBE



SECTION A-A

RELEASED
2014-01-08

NOTES:

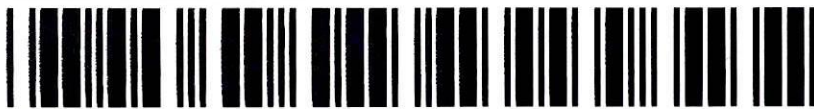
- 1) MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING, $\phi 0.625 \times 0.125$ WALL
PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8
OR AMS 4080 OR AMS 4082 OR AMS 4083
OR ASTM B210 OR ASTM B241
REF DART SPEC M6061T6T0.625W0.125
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.24 lbs

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	A.P.	DRAWING NO. D4775	REV. C
MFG. APPR.			SHEET 2 OF 2
APPROVED		TITLE BASKET STRUT ASSEMBLY	SCALE NTS
DE APPR.		COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	13.11.01		

DART
AEROSPACE
S041887

Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Strut Tube

PART NO: D4775-1

Original Serial #: S041887

Revision:

Operation: Start up Operation 02/13/18

Change No:

Job No: 169897